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The DEIS/R proposes no mitigation measures relating to the potential for the FSRU to adversely affect the recreational experience of boaters, fishermen and others who use the ocean in that area. This impact on recreation requires further analysis.

4.16 SOCIOECONOMICS

Commercial Fishing: The DEIS/R needs to correct the safety and exclusion zones based on a renewed safety analysis per the above comments. In addition, the DEIS/R needs to consider the fact that LNG tankers will be constantly arriving, berthing and unloading, and leaving, so the exclusion zones will be constant.

4.18 WATER QUALITY AND SEDIMENTS

The DEIS/R's discussion of offshore water quality impacts is insufficiently detailed. In general, the DEIS/EIR repeatedly dismisses potential impacts as "less than significant" or "unlikely" because discharges would be "relatively" small/minimal and/or "dissipate rapidly" (see footnote for examples of occurrences) without providing any basis for this conclusion. For example, in stating that discharges of untreated sewage are expected to be "relatively small," (p. 4.18-19) the DEIS/R should provide the discharge volumes against which the project volumes are being compared, and should describe the estimated volume of anticipated discharges. Furthermore, the conclusion that any such discharge would "dissipate rapidly" and will therefore be less than significant does not conform to the description of metrics under the Clean Water Act Section 403, Ocean Discharge Criteria (40 CFR Part 125, Subpart M). According to these criteria, determination of acceptable discharges is based on diluted concentration within the mixed zone (as calculated by a EPA-approved plume model) (40 CFR §§ 125.121(c) and 125.123 (d)(1)). It appears that an NPDES permit application has been submitted for the proposed action (see Reference BHPB NPDES Permit Application, January 2004). Therefore, it is logical that specific information about how conclusions were reached is available – at least for the FSRU discharges. At a minimum the DEIS/R should explain the methods and calculations used for determining whether significant impacts will occur.

4.18.1 Environmental Setting

The DEIS/R indicates that sediments in the vicinity of the offshore horizontal drill exit points were collected and tested for toxicity. It is not clear, however, who conducted this testing, what points were sampled, what constituents were tested for, and what the results indicated. The DEIS/R must disclose this information.

4.18.4 Impact Analysis

The DEIS/EIR fails to evaluate water quality impacts due to atmospheric deposition of pollutants from air emissions due to the vessel traffic associated with the project. Atmospheric deposition is a potentially significant source of nutrients and toxic contaminants to surface and coastal ocean waters in the project area. A comprehensive study by the Southern California Coastal

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Section 4.15.4 discusses this topic.

G437-258

Sections 2.2.4 and 4.3.1.4 discuss the size of the safety zone. Section 4.16.4 contains additional information on commercial fisheries impacts.

G437-259

Section 4.18.4 contains additional information and analysis. Section 2.2.2.4 includes information on the Project's utility and water management systems. As discussed in Section 4.1, the analysis presumes compliance with existing laws and regulations.

G437-260

Section 4.18 has been updated with new information. Section 4.18.1.2 includes the analytical results of the sediment testing.

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As discussed in Section 4.6, to reduce overall Project emissions, the Applicant has proposed to fuel LNG carriers operating within California Coastal Waters, as defined by the California Air Resources Board, with natural gas. The Applicant reduced, by more than half, the number of weekly and annual transits made by the crew/supply boat to and from Port Hueneme and the FSRU. The Applicant has also agreed to identify an emission reduction program (in addition to reductions inherent to the Project) that would reduce annual emissions of oxides of nitrogen (NOx) by an amount up to the FSRU's annual NOx emissions, which includes emissions from carrier offloading equipment.

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Water Research Project (SCCWRP) measured the amounts and spatial patterns of atmospheric deposition of nutrients and toxic contaminants (focusing on trace metals) to Santa Monica Bay. The results of this study showed that deposition (direct additions to the bay as well as indirect additions due to deposition on the watershed and subsequent runoff to the bay) was "significant relative to other inputs of metals to the Bay."⁷⁶ Other findings that are relevant include: dry deposition is the primary pathway of pollutant additions from the atmosphere; most deposition appears to occur within close proximity to the emission source; and that most trace metal contaminants originated from "area sources (off-road vehicles and small businesses) in the Santa Monica Bay watershed."⁷⁷

Increased tugboat and support vessel traffic associated with the proposed action will contribute heavily to the off-road sources of diesel exhaust emissions in the area. Furthermore, a series of tracer studies of offshore and coastal dispersion of pollutants conducted at Ventura, Carpinteria and Pismo Beach indicated that the depth of mixing of the marine boundary layer (the air just above the ocean surface) is quite shallow (approximately 100m). This suggests that exhaust plumes from the project's vessel traffic in these regions are more likely to become trapped just above the water surface and create high pollutant concentrations.⁷⁸

With significant projected increases in air pollutant emissions – particularly due to the extreme increase in support vessel traffic out of Port Hueneme – the DEIS/R should at least describe the projected dispersion and potential deposition of emissions. An Offshore and Coastal Dispersion Model (OCD), one of the U.S. EPA "preferred/ recommended" air quality models, is used to determine impacts from point- or line-sources and could be applied here.⁷⁹ (This model was tested for the Santa Barbara Channel region previously.)⁸⁰

Ocean deposition of air pollutants and concomitant water quality impacts would not be avoided or mitigated by any of the proposed air quality or water quality mitigation measures, including the purchase of air emissions offset credits. Accordingly, atmospheric deposition of air emissions from project-associated vessel traffic could cause significant water quality impairments (particularly near the Port of Hueneme), and must be evaluated in the DEIS/R.

⁷⁶ Stolzenbach, KD, Lu, R, Xiong, C, Friedlander, S, Turco, R, Schiff, K, Tiefenthaler, L. (September 2001). *Measuring and Modeling of Atmospheric Deposition on Santa Monica Bay and the Santa Monica Bay Watershed*. Final Report to the Santa Monica Bay Restoration Project. Retrieved on August 3, 2004 from the Southern California Coastal Water Research Project website: <www.sccwrp.org>

⁷⁷ Ibid.

⁷⁸ "Appendix C Air Emissions and Air Quality" in Shipboard Pollution Control. U.S. Navy and MARPOL Annex V. National Academy Press, Washington D.C. 1998. Retrieved on June 2, 2004 from the National Academy Press website: <http://stills.nap.edu/html/shipboard_pollution/appendix-c.html#PollutantDispersionintheMarineBoundaryLayer>

⁷⁹ "Dispersion Models." Technology Transfer Network. U.S. Environmental Protection Agency (EPA). Retrieved on June 2, 2004 from the EPA website: <<http://www.epa.gov/scram001/tt22.htm#rec>>

⁸⁰ "A.7: Offshore and Coastal Dispersion Model" in Appendix A—Summaries of Preferred Air Quality Models. Compliance Resource Center. Retrieved on June 2, 2004 from the Seton Resource Center website: <<http://www.setonresourcecenter.com/40CFR/Docs/wcd0005a/wcd05a4f.asp>>

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The DEIS/R contains an alarming discussion of the FSRU's use of ballast water. See DEIS/R, p.4.7-38, ll. 9-22. The FSRU alone will use between 15,000 and 20,000 metric tons of ballast water per day. This equals between 4,000,000 and 5,300,000 gallons of water per day. Further, the DEIS/R admits that 100% of the entrained or impinged organisms will die (DEIS/R, p. 4.7-38, lines 18-19), yet contends that neither the volume of ballast water used nor the death of millions of organisms constitute significant impacts. To the contrary, these aspects of the Project will have significant environmental impacts far beyond the Applicant's claim that enforcement of a "safety zone" surrounding the FSRU somehow mitigates these impacts. DEIS/R, p. 4.7-46.

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The DEIS/R further admits that the cooling system for the FSRU's diesel generators will use approximately 6.34 million gallons per day of seawater (264,200 gallons per hour). DEIS/R, p. 2-49, ll. 25-26. However, the DEIS/R fails to analyze the potential adverse effects of this huge seawater use on marine resources. Clearly, this use of seawater may have similar (or worse) environmental impacts than the use of seawater in the FSRU's LNG vaporization system. At the very least, the Project must add filtration and chemical processing (as contemplated for the vaporizer cooling water) to protect marine resources.

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4.19 ENVIRONMENTAL JUSTICE

The DEIS/R acknowledges (p. 4.19-14) that the proposed action will have a disproportionate impact on minority and low-income communities because of the long-term risk of a pipeline rupture that would disproportionately affect these communities. The DEIS/R proposes a variety of construction and safety measures that do not eliminate or substantially reduce this disproportionate risk, since a residual risk remains even with the implementation of all mitigation measures. In addition, the DEIS/R proposes an environmental justice-specific measure (MM EJ-1a) that requires that public education materials and notification of public comment meetings shall be in both English and Spanish.

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Taken together, these measures do not reduce or avoid the acknowledged disproportionate impact on minority and low-income communities. While the construction and safety measures may reduce the overall risk of pipeline rupture, they do not provide a relative reduction in the disproportionate risk. Thus, after implementation of all these measures, a potentially significant safety risk remains, and this risk will still disproportionately burden minority and low-income communities. Bilingual hearing notices or warnings will not appreciably reduce this risk. No substantial evidence supports the DEIS/R's conclusion that the proposed action's environmental justice impact will be reduced to a less than significant level.

According to the Council on Environmental Quality's Environmental Justice Guidelines for NEPA, identification of a potentially significant environmental justice impact "should heighten agency attention to alternatives (including alternative sites), mitigation strategies, monitoring needs, and preferences expressed by the affected community or population." By failing to meet even the standard NEPA and CEQA mitigation requirements, however, the DEIS/R fails to fulfill the requirements of Executive Order 12898, NEPA, and CEQA. The DEIS/R fails to give heightened attention to or evaluate additional alternatives that would avoid or minimize the

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Section 4.7.4 contains revised text on this topic. Appendix H1 contains additional information on this topic.

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The Project has been modified since issuance of the October 2004 Draft EIS/EIR. See Section 1.4.2 for a summary of Project changes. The previously proposed FSRU generator engine cooling system used seawater as the source of cooling water for the four generator engines. The Applicant now proposes using a closed tempered loop cooling system that circulates water from two of the eight submerged combustion vaporizers (SCVs) through the engine room and back to the SCVs, which reduces the seawater intake volume by about 60 percent. The seawater cooling system would remain in place to serve as a backup system during maintenance of the SCVs or when the inert gas generator is operating. Section 2.2.2.4 contains a description of the proposed uptakes and water uses for the FSRU.

Section 4.7.4 contains information on uptake volumes and potential impacts of seawater uptake and discharge on marine biota, including ichthyoplankton from intake of seawater, from thermal discharges of cooling water. The ichthyoplankton impact analysis (Appendix H1) includes both literature results and data from California Cooperative Oceanic Fisheries Investigations (CalCOFI) surveys. CalCOFI surveys have been consistently collected over a period of time and are the best scientific data currently available.

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Sections 4.19.1 and 4.19.4 discuss this topic. Section 4.2.8 identifies mitigation measures to reduce the risks to residents along pipeline routes.

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The methodology used in Section 4.19 is consistent with EPA's environmental justice guidelines and the methodology adopted by the CSLC to implement its environmental justice policy.

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proposed action's environmental justice impact. The DEIS/R further fails to consider effective mitigation strategies and monitoring needs that would actually reduce the disproportionate risk assumed by minority and low-income communities. Finally, the DEIS/R fails to consider preferences expressed by the affected community. The DEIS/R must be revised and recirculated to include effective mitigation measures to address the proposed action's environmental justice impacts and to implement the Council on Environmental Quality's guidance.

4.20 CUMULATIVE IMPACTS ANALYSIS

Other LNG Projects: The DEIS/R should consider all of the other LNG projects that are proposed to import natural gas to California.

Expansion of the CINMS: The DEIS/R erroneously dismisses any potential conflict between the potential expansion of the CINMS, despite the fact that other alternative locations are rejected because they conflict with the purposes of the Sanctuary. (See comment above.) The DEIS/R also incorrectly states that the boundary expansion EIS will be not finalized for several years (DEIS/R, p. 4.20-23); the CINMS web site shows that the Draft EIS will be released in fall 2005 and a final decision will be made in fall 2006. Given the pending process for consideration boundary expansion of the CINMS, the DEIS/R should clearly explain the potential conflicts between the proposed project and the potential expansion.

Offshore Oil and Gas Leases: The DEIS/R fails to consider the cumulative impacts from the 36 undeveloped federal leases off the coast of Ventura and Santa Barbara Counties, stating that development is "uncertain due to ongoing litigation." (See, for example, DEIS/R, pp. 4.20-4, 4.20-17.) In fact, the litigation was resolved in December 2002, when the Ninth Circuit Court of Appeals directed the U.S. Minerals Management Service to conduct environmental and coastal consistency review for the leases. The oil companies that hold these leases have submitted their requests to continue the leases so that they can be developed. The DEIS/R should consider the cumulative impacts that will occur if the leases are in fact developed.

Marine Traffic: The proposed project will result in a significant increase in marine vessel traffic. At the same time, the number and size of large vessels transiting the California coast is expected to double. This increase in large vessel traffic, in the exact same location where the LNG tankers will travel, will cause cumulative safety, air, water, biological, recreational, commercial and aesthetic impacts that must be fully analyzed.

Climate Change: Increased development and use of fossil fuels will contribute to global warming and climate change. The DEIS/R must analyze the cumulative impacts of this project in conjunction with other fossil fuel-related energy projects.

G437-266

Impacts PS-4 and -5 in Section 4.2.8.4 contain mitigation to reduce the risks to residents along any analyzed pipeline route.

G437-267

The proposed Project pipeline route has been modified several times in response to the preferences stated by the affected community (see Section 3.4.4).

G437-268

Section 4.14 contains additional information. The document was recirculated in March 2006, for a 60 day review period.

G437-269

Section 4.20 includes an analysis of the cumulative effects of the proposed LNG facility at the Clearwater Port and at the Port of Long Beach.

G437-270

Sections 4.13.1 and 4.13.2 contain additional information on this topic.

G437-271

Sections 4.20.1 and 4.20.3 contain additional information on this topic.

G437-272

Section 4.20.3 contains additional information on this topic.

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Section 4.20.3.6 contains additional information on this topic.

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6.0 CONCLUSIONS AND RECOMMENDATIONS**6.1 RECOMMENDED MITIGATION AND MONITORING PROGRAM**

See comments above, regarding impact analysis and discussion of mitigation measures. We respectfully disagree with the conclusions in the DEIS/R that certain impacts would be effectively mitigated. Many mitigation measures are unclear, vague, deferred and unenforceable.

6.2 ENVIRONMENTALLY PREFERABLE PROJECT ALTERNATIVE

See comments above. The DEIS/R improperly limits the range of alternatives and thus precludes the identification of the true environmentally preferable project alternative: energy conservation, efficiency and renewable energy sources. The DEIS/R must be revised to consider this alternative, and to compare the impacts of this alternative to the proposed project.

CONCLUSION

This DEIS/R represents the first review of an offshore LNG project proposed to supply natural gas to California. It is imperative that the environmental analysis be complete and accurate. In addition, due to the tremendous impacts posed by this project, the State of California must consider environmentally preferable alternatives such as energy conservation, efficiency and renewable sources of energy.

As shown above, the DEIS/R must be revised and recirculated to: (1) properly describe the purpose, need and objectives of the proposed project, (2) provide a complete project description, including an analysis of all of the impacts associated with producing the natural gas and transporting it to California, (3) provide an adequate baseline from which to measure project impacts, (4) utilize appropriate methodology to assess safety impacts, (5) adequately assess other project impacts, such as air quality, water quality, biology, noise, aesthetics, socioeconomics, and environmental justice, (6) include a complete analysis of cumulative impacts, and (7) provide a reasonable range of alternatives.

Sincerely,



Linda Krop, Chief Counsel
John Buse, Senior Staff Attorney
Alicia Finigan, Staff Attorney
Brian Trautwein, Environmental Analyst

Exhibits:

- 1 – Letter from Bill Powers (inc. attachments)
- 2 – Letter from Dr. Woodrow W. Clark II (inc. attachments)

G437-274

Additional information has been added throughout the document and many mitigation measures have been revised.

G437-275

See response to Comments G437-2, G437-5.1, G437-6, among others herein.

G437-274

G437-276

Section 1.2 contains updated text concerning the purpose and need of the Project.

G437-277

G437-275

Executive Order 12114, Environmental Effects Abroad of Major Federal Actions, requires Federal agencies to consider the potential environmental effects of major Federal actions that could significantly affect the global commons outside the jurisdiction of any nation. Executive Order 12114 is not applicable to the extraction and development of natural gas in foreign countries.

An evaluation of the Project's environmental effects abroad must also be viewed within the context of section 15040 of the State CEQA Guidelines, which specifically defines and correspondingly limits the authority provided to State and local agencies under the CEQA.

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The Applicant has stated that the source of the natural gas for this Project would be either Australia, Malaysia, or Indonesia. As these countries are sovereign nations, the Applicant would be required to comply with those countries' applicable environmental laws and regulations pertaining to the extraction and development of natural gas fields as well as those pertaining to the liquefaction and transfer of LNG to LNG carriers. Consideration of the Applicant's compliance with a foreign nation's applicable laws and regulations is beyond the scope of this EIS/EIR.

The Applicant has indicated that the Scarborough natural gas field in the state of Western Australia could be a potential source of natural gas for the Project. In May 2005, the Honourable Ian Macfarlane, the Australian Federal Minister for Industry, Tourism and Resources, stated, "Development of the Scarborough Field and related support facilities must be carried out in accordance with applicable laws and regulations of both the Australian Government (federal) and the State Government in Western Australia. Any activities will be subject to assessment and approvals under the applicable environmental legislative regimes. These include, among others, the Commonwealth Environment Protection and Biodiversity

Conservation (EPBC) Act 1999, governing matters of national environmental significance, and, under State legislation, the Western Australian Environmental Protection Act 1986. The objectives of the Commonwealth's environmental regulatory regimes are to provide for the protection of the environment and ensure that any petroleum activity is carried out in a way that is consistent with the principles of ecologically sustainable development." (Appendix L contains a copy of this letter.)

Section 1.3 has been revised to include information on Indonesian and Malaysian environmental requirements that would regulate impacts related to producing and exporting natural gas. All three countries have existing LNG liquefaction facilities.

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See the response to Comment G437-276.

G437-279

See the response to Comment 437-3.

G437-280

See the response to Comment G437-276.

G437-281

Section 4.20 has been updated to include new information and analysis.

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See the response to Comment G437-2.

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- 3 – “Forget About Liquefied Natural Gas: We Need Diverse Clean Energy Now,” Dr. Woodrow W. Clark II
- 4 – “Natural Gas Price Effects of Energy Efficiency and Renewable Energy Practices and Policies,” American Council for an Energy-Efficient Economy
- 5 – “Comments of Synapse Energy Economics on the California Natural Gas Utilities’ Phase 1 Proposals”
- 6 – Letter from Dr. Thomas O. Spicer
- 7 – Letter from Dr. James Fay
- 8 – Letter from Dr. Michael McGinnis

cc: U.S. Senator Barbara Boxer
 U.S. Senator Dianne Feinstein
 U.S. Representative Lois Capps
 U.S. Representative Elton Gallegly
 Channel Islands National Marine Sanctuary
 Channel Islands National Marine Park
 Governor Arnold Schwarzenegger
 Secretary of Resources Mike Chrisman
 State Lands Commissioner Cruz Bustamante
 State Lands Commissioner Steve Westley
 State Lands Commissioner Tom Campbell
 California Coastal Commission
 State Senator Tom McClintock
 State Assemblymember Fran Pavley
 State Assemblymember Pedro Nava
 County of Ventura Board of Supervisors
 County of Ventura APCD
 City of Malibu
 City of Oxnard
 City of Santa Clarita
 Statewide LNG Stakeholder Environmental Working Group
 California Coastal Protection Network

G437-283

Mr. Powers submitted his letter independently. His letter is G464.

Exhibit 1

G437-283

BORDER
POWER PLANT
WORKING GROUP



GRUPO DE TRABAJO DE
TERMoeLECTRICAS
FRONTERIZAS

December 17, 2004

Lieutenant Ken Kusano
U.S. Coast Guard
2100 Second Street, SW
Washington, D.C. 20593
kkusano@comdt.uscg.mil

Mr. Cy Oggins
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825
oggins@slc.ca.gov

**Subject: Border Power Plant Working Group (BPPWG) Comments on Draft EIS/EIR for
Cabrillo Port Liquefied Natural Gas Deepwater Port**

Dear Lt. Kusano and Mr. Oggins:

Thank you for this opportunity to comment on the Draft EIS/EIR for the Cabrillo Port Liquefied Natural Gas Deepwater Port. The Border Power Plant Working Group (BPPWG) comments on the Draft EIS/EIR are enclosed. BPPWG comments are provided in the order the issues being commented upon are presented in the Draft EIS/EIR. Please contact me at (619) 295-2072 if you have any questions about the enclosed comments.

Sincerely,

Bill Powers, P.E.

Bill Powers, P.E.
Chair, Border Power Plant Working Group

cc: U.S. Senator Diane Feinstein
U.S. Senator Barbara Boxer
Congresswoman Nancy Pelosi
Congresswoman Lois Capps
Congressman Bob Filner
Governor Arnold Schwarzenegger
State Senator Christine Kehoe

Comment 1: Section 1.2.2.1 National Natural Gas Needs

The U.S. Department of Energy (DOE) Energy Information Administration (EIA) natural gas demand growth projection assumes a steady 1.8 percent increase in natural gas demand growth during the 2002-2025 timeframe. The EIA also projects an increase in domestic natural gas production of approximately 20 percent over the same time period. The 1.8 percent demand growth assumes business-as-usual gas consumption patterns coupled with a much greater reliance on natural gas-fired power generation in the future. Please see Attachment A for a detailed assessment by the Border Power Plant Working Group of natural gas supply/demand projections over the 2002-2025 time period. Slide 8 of Attachment A includes a plot of domestic gas consumption since 1970. Natural gas consumption has ebbed and flowed considerably in the last 30 years. BHP Billiton uses the EIA assumption of a sustained high growth rate in natural gas-fired electric generation over the next 20 years to underscore the need for LNG supplies. However, this sustained growth rate scenario appears to be worst-case at best and unrealistic at worst given the historic volatility in gas demand, and the fact that higher gas prices and concerns about fossil fuel dependence are motivating (in part) many regions of the country to establish aggressive renewables and efficiency standards to reduce the need for new fossil-fuel fired power generation capacity.

Sempra Energy (parent company of Southern California Gas Company and San Diego Gas & Electric), in contrast to EIA, BHP Billiton, National Petroleum Council, and the California Energy Commission, has predicted a dramatic decline in domestic natural gas production over the 2002-2025 timeframe. This projection was presented to the California Public Utilities Commission in December 2003 in the initial phase of a natural gas procurement proceeding critical to opening the California market to LNG supplies. The company provided no supporting evidence. The Sempra Energy "doomsday scenario" has been debunked in the press (see Attachment B). SoCalGas will transport all natural gas supplied from Cabrillo Port. Sempra Energy is also hoping to construct an LNG terminal in Baja California to serve the Southern California market and sell LNG directly to its affiliates SoCalGas and SDGE.

California has a stated goal of 20 percent renewables by 2017. However, the Governor is expected to propose legislation requiring 33 percent renewables by 2020 during the 2005 legislative session. SDGE has already committed to 24 percent renewables by 2014, essentially equivalent to 33 percent by 2020.

As noted in Slide 28 of Attachment A, a large number of California communities are committing to Community Choice Aggregation with a renewables target of 40 percent. On a statewide basis, each 10 percent increase in the renewables percentage, which equals approximately 30,000 GWh of electric power demand, approximates the electric power generated by the natural gas throughput of one LNG terminal. Pennsylvania signed into law an 18 percent renewables target by 2020 in December 2004. This renewables commitment will dramatically reduce the growth in natural gas demand in Pennsylvania. New York, Colorado, and Texas are all in some stage of committing to very ambitious renewables targets. This is reality, not the conservative business-as-usual assumption that produced the DOE's 1.8 percent per year growth rate in natural gas consumption over the 2002-2025 timeframe.

A similar trend is occurring in the area of energy efficiency. Dramatic reductions in electric power demand and associated natural gas consumption are achievable at low cost through energy

efficiency. The high growth in gas-fired power generation assumed by the DOE does not take into consideration recent increased energy efficiency targets in certain highly populated areas of the country. California is a good example. On September 23, 2004 the CPUC voted to accelerate utility energy efficiency goals beyond business-as-usual targets. As stated by Commissioner Kennedy following the vote, *“these accelerated efficiency goals will save the equivalent output of five power plants.”*¹ The output of five power plants is equivalent to the natural gas throughput of half of an LNG terminal.

Recommendation: The most reasonable natural gas demand scenario is to assume that within 2-4 years all of the highly populated regions of the country will be subject to a 2020 renewables target in the range of 20 percent, and that comparable energy efficiency targets will be in place. Prepare an alternative natural gas demand curve that assumes the country achieves a 20 percent renewables target by 2020 and a comparable reduction in demand via aggressive incorporation of low-cost energy efficiency measures (similar to those listed in Section 4.10.1.1).

Comment 2: Section 1.2.2.2 California Natural Gas Needs

California’s Energy Action Plan (May 2003) calls for maximum emphasis on energy efficiency and renewables to meet California’s energy needs. Currently our natural gas demand is declining. See Attachment A. The state demand for natural gas is not anticipated to return to the 2002 peak until 2016 assuming a business-as-usual demand projection. The only reason CEC figures show an increase is because the CEC begins the “clock” in a low demand year (2003). Aggressively developing low cost energy efficiency opportunities in California would eliminate the natural gas demand of one LNG terminal. Increasing the renewables from 20 percent to 30 percent by 2017 would eliminate the demand of a second LNG terminal. Many cities and counties in the state are taking advantage of the Community Choice electricity procurement legislation to commit to a renewables target of 40 percent by 2017. Industry analysts have determined that in nearly all cases these communities can achieve the 40 percent renewables target without an increase in rates compared to utility charges.

Importing LNG will not modulate natural gas prices in California or nationally. The core issue is a malfunctioning natural gas trading system that is unresponsive to competitive pressures. Adding additional supplies will have little or no impact on price in a market with fundamental transaction deficiencies. See a detailed discussion of this topic in Attachment A.

California is actually considerably closer to its primary natural gas supply basins (Rockies, New Mexico, West Texas, Alberta) than many of the major Eastern U.S. natural gas demand centers (see Slide 4 of Attachment A). The concept that California is at the tail end of a very long gas supply system is incorrect.

The statement on p. 1-8 (line 4) that domestic and Canadian gas field production is in decline is simply false. BHP’s own presentation material (Southern California LNG Import Terminal Project brochure, August 2004) uses DOE EIA figures showing a 20 percent increase in domestic production between 2002 and 2025. Canadian exports to the U.S. are expected to be steady through at least 2020 according to the Canadian National Energy Board (see Slide 14).

The statement on p. 1-8 (line 9-11) that the CEC has identified the need to develop new natural gas infrastructure to access diversity of fuel supply sources should be contrasted with the September 2, 2004 decision by the CPUC to authorize SoCalGas to terminate firm capacity

¹ California Energy Circuit, *CPUC Adopts Ambitious Energy Savings Targets*, September 24, 2004, p. 9.

rights to 1,400 mmcf/d of domestic natural gas. The CPUC decision is in complete contrast to the concept of maintaining access to a diversity of supply sources. For a complete discussion of the CPUC action see Attachment A.

Comment 3: Section 1.2.3 Project Objectives

The statement is made on p. 1-8 (line 30) that by importing LNG from Australia the state would no longer need to rely solely on gas from North America. This phrase gives the impression that importing gas from 10,000 miles away, and the attendant global warming gases and air emissions from burning the gas, is somehow preferable to working with North American natural gas resources and creatively addressing any potential resource constraints through aggressive renewables and efficiency programs.

Comment 4: Section 3.3.1 Energy Conservation

The business-as-usual natural gas demand increases in California cited on p. 3-5 (lines 17-18) are relative increases to the low demand year of 2003. Even in the business-as-usual analysis gas demand does not return to 2002 levels until the 2014-2016 timeframe.

The statement on p. 3-5 (lines 21-24) is incorrect. Energy conservation measures can be deployed far more quickly than the 4-year construction schedule of an LNG regas terminal. See Attachment A for an overview of the speed with which low cost energy conservation measures can be deployed and the attendant impact on gas demand and price. California shaved 11 percent off peak electricity demand in May 2001 almost overnight, and completely avoided projected brownouts and blackouts projected for the summer of 2001 by putting into action simple, low cost energy conservation measures.

Comment 5: Section 3.3.2 Renewable Energy Sources

The statement on p. 3-5 (lines 21-24) is incorrect. Many renewable energy sources can be deployed far more quickly than the 4-year construction schedule of an LNG regas terminal. Wind power is renowned for how rapidly it can be deployed relative to conventional fossil-fuel fired power plants, with the timeline between project authorization to operation being as little as twelve months even for relatively large projects.

Comment 6: Section 4.10.1.1 California Natural Gas Plan

The CEC's business-as-usual scenario shows gas demand increasing from 1.5 to 2 percent per year. This is belied by reality, which shows the state's gas demand is in slight decline with rebound to 2002 peak levels in the 2014 – 2016 timeframe. The CEC has also prepared alternative demand growth scenarios that assume progressively more aggressive deployment of cost-effective renewables and energy efficiency measures. Cost-effective means less costly or comparable to natural gas-fired baseload and peaking turbine installations. The more aggressive scenarios result in a negative growth rate in natural gas demand in California. The text should include the range of scenarios examined by the CEC and not only the basecase business-as-usual scenario. The business-as-usual scenario is already obsolete as a result of CPUC decisions on energy efficiency (September 2004) and Community Choice Aggregation (December 2004), and the state's almost certain commitment to a 30 percent renewables by 2017 (or equivalent) target.

The statement on p. 4.10-1 (lines 18-19) that the state's Energy Action Plan recognizes that natural gas can not be eliminated and recognizes the need for reliable supplies of natural gas in no way supports the addition of LNG supplies. No one in California is suggesting that use of

natural gas be eliminated, though the Energy Action Plan recognizes the overarching need to reduce dependence on natural gas over time by: 1) meeting demand through energy efficiency and renewables, and 2) only adding new gas sources if the first two options will not meet the need. This is a common sense plan for driving down natural gas demand over time.

Attachments

Attachment A: Bill Powers, P.E., *Should the CPUC Grant Access to Utility Ratepayer Contracts to Ensure LNG Terminals are Built to Serve the California Market?* December 17, 2004 (PowerPoint presentation)

Attachment B: San Diego Union Tribune, *Sempra's dire forecast – company's prediction of natural gas crisis challenged by other energy experts*, October 3, 2004

Attachment A: Should the CPUC Grant Access to Utility Ratepayer Contracts to Ensure LNG Terminals are Built to Serve the California Market?

BPPWG Comments on Cabrillo Port LNG Draft EIS/EIR, December 17, 2004

Bill Powers, P.E.

Border Power Plant Working Group

tel: (619) 295-2072

www.borderpowerplants.org

Natural Gas Supply, Demand, and Price:

Do We Need LNG to Prevent Another Energy Crisis in California?

California Natural Gas 101

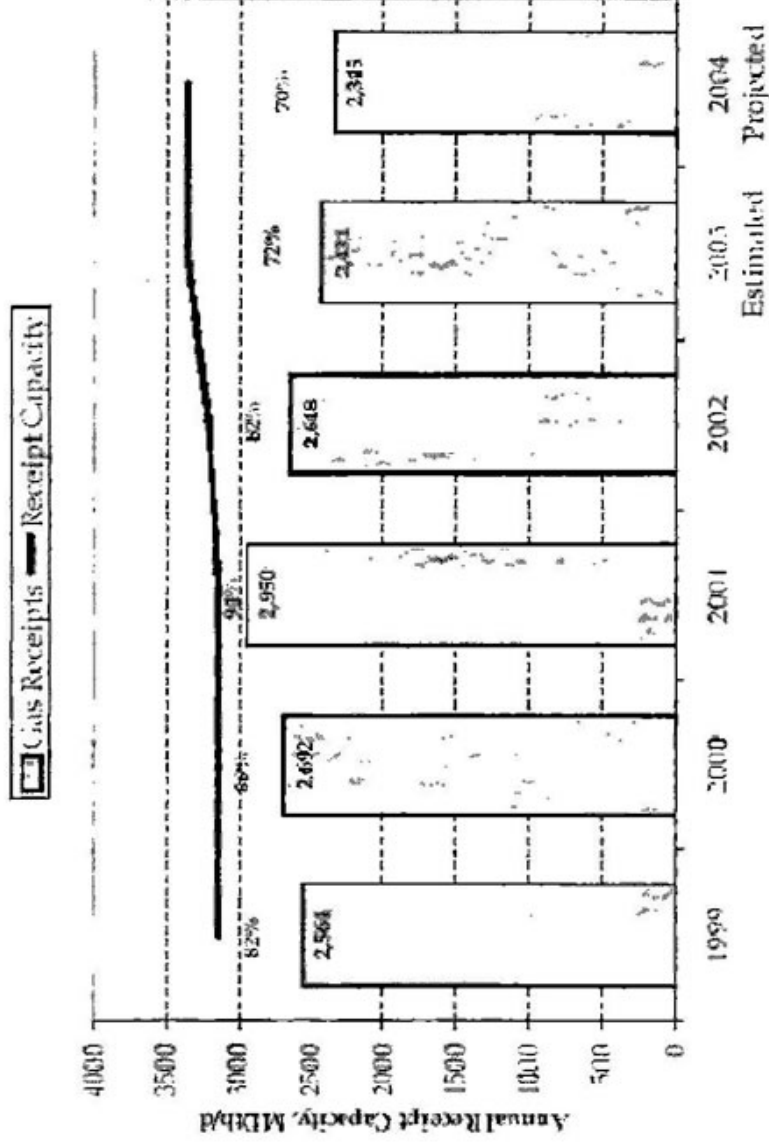
U.S. daily usage rate (billion cubic feet per day - Bcfd)	60 Bcfd
California daily usage rate	6 Bcfd
Utility core customer usage (residential, small/medium business)	1.5 – 2 Bcfd
Utility non-core customer usage (powerplants, industrial)	4 – 4.5 Bcfd
Capacity of one LNG terminal	1 Bcfd
Current sources of gas reaching California	Permian Basin (TX), San Juan Basin (NM), SW Wyoming, Alberta (Canada), California

From: Greg Stringham, Canadian Association of Petroleum Producers, *Canadian Natural Gas – An Important Part of North American Supply, Now and In the Future*, National Energy Modeling System/ Annual Energy Outlook Conference, March 2004



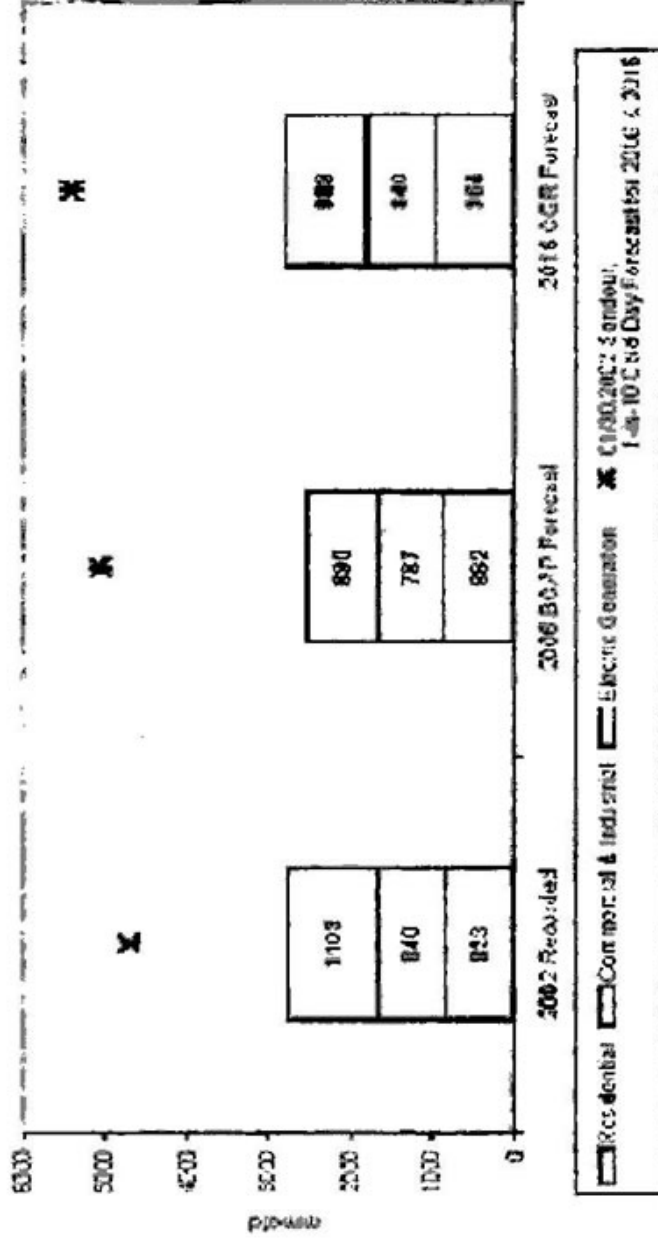
PG&E, declining gas demand

From: Les Buchner, Manager PG&E, Forecast of Demand Natural Gas Market Outlook 2006 – 2016, CPUC/CEC Workshop, December 9, 2003, San Francisco.



SoCalGas & SDGE, declining gas demand

From: Jeff Hartman, Director Energy Markets and Capacity Products SoCalGas/SDGE, Future Demand for Natural Gas in Southern California: 2006 ~2016, CPUC/CEC Workshop, December 9, 2003, San Francisco.



Are we running out of domestic supplies of natural gas? No.

What the Department of Energy says:

- U.S. domestic production will increase by ~20% from 2001 to 2025, in response to 1.8% per year assumed growth rate in demand;
- Canadian imports will fluctuate, though remain relatively constant from 2001 to 2025;
- Primary growth area is electric power production.

California: Gradual decline in use from 2002 peak in basecase business-as-usual scenario, rebounding to 2002 level in 2016.